

**ABSTRACT**

A method for simply and conveniently detecting acetyltransferase and deacetylase activities of proteins by executing an acetylation reaction of a peptide substrate with an acetyltransferase, or a deacetylation reaction of an acetylated peptide substrate with a deacetylase, and after the completion of these reactions, detecting the acetyl group bound to the peptide substrate by using an anti-acetylated peptide antibody. This system for detecting acetyltransferase and deacetylase activities using the anti-acetylated peptide antibody enables screening inhibitors or enhancers of acetyltransferase and deacetylase. A system for screening deacetylase inhibitors or acetyltransferase enhancers using cultured cells is also provided.

00618424-071800